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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/565,090	01/05/2007	Danielle Miousse	701826-57620	6156

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EXAMINER	
ALLEN, CAMERON J	
ART UNIT	**PAPER NUMBER**
1797	

MAIL DATE	DELIVERY MODE
02/04/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/565,090	DANIELLE MIOUSSE	
	Examiner	Art Unit	
	Cameron J. Allen	1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 January 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *1/18/2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 9 recites the limitation "said emulsion" in claim 9 sentence 2 words one and two. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by US Massholder 5,573,676.

Regarding claim 1, the Massholder reference teaches process for the treatment of water containing a contaminant, said process comprising the steps of:

(a) adding a sufficient quantity of hydrogen peroxide to the water; and (Column 4 line 52)

(b) radiating the water with ultraviolet rays during a sufficient time for allowing decomposition of the contaminant until said treatment is achievecl. (Column 4 line 52)

Regarding claim 2, Massholder teaches the process of claim 1, wherein said

ultraviolet rays are of a wavelength of 185 nm. (Column 4 line 64)

Regarding claim 3, Massholder teaches the process of claim 1, wherein said contaminant is miscible with water. (Column 1 line 25) *The examiner interprets the cyanides to be miscible with water.*

Regarding claim 4, Massholder teaches the process of claim 1, wherein said contaminant is selected from the group consisting of fluoresceine, benzene or derivative thereof, phenol or derivative thereof and hydrocarbon. (Column 7 line 67) *The examiner interprets mineral oil to be a derivative of hydrocarbons.*

Regarding claim 5, Massholder teaches the process of claim 1, wherein step a) and step b) are performed simultaneously. (Column 2 line 61)

Claims 1, 3, 4, and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Cater et al. US 5,043,080.

Regarding claim 1, the Cater reference teaches process for the treatment of water containing a contaminant, said process comprising the steps of:
(a) adding a sufficient quantity of hydrogen peroxide to the water; and (Column 5 line 68)
(b) radiating the water with ultraviolet rays during a sufficient time for allowing decomposition of the contaminant until said treatment is achieved. (Column 6 line 5-8)

Regarding claim 3, Cater teaches the process of claim 1, wherein said contaminant is miscible with water. (Column 3 line 49-55)

Regarding claim 4, Cater teaches the process of claim 1, wherein said contaminant is selected from the group consisting of fluoresceine, benzene or derivative thereof, phenol or derivative thereof and hydrocarbon. (Column 3 line 60-65)

Regarding claim 6, Cater teaches the process of claim 1, wherein said process is initiated with step b) followed by step a). (Column 6 line 10)

Claims1,3,4,and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Downey Jr. US 5,587,069.

Regarding claim 1, the Downey reference teaches process for the treatment of water containing a contaminant, said process comprising the steps of:

(a) adding a sufficient quantity of hydrogen peroxide to the water; and (Column 2 line 21-28)

(b) radiating the water with ultraviolet rays during a sufficient time for allowing decomposition of the contaminant until said treatment is achieve. (Column 4 line 52)

Regarding claim 3, Downey teaches the process of claim 1, wherein said contaminant is miscible with water. (Column 1 line 13-19)

Regarding claim 4, Downey teaches the process of claim 1, wherein said contaminant is selected from the group consisting of fluoresceine, benzene or derivative thereof, phenol or derivative thereof and hydrocarbon. (Column 6 line 52)

Regarding claim 7, Downey teaches the process Of claim 1, further comprising a step of passing the water in a coalescer before step a). (Column 6 line 45-50)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Downey Jr. as applied above in claim 1.

Regarding claim 8, Downey teaches the process of claim 1, but does not teach wherein said hydrogen peroxide is added until a phase separation is initiated. It would

have been obvious to one of ordinary skill in the art at the time of the invention to find the workable or optimal range for the addition of hydrogen peroxide, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. MPEP 2144.05

Regarding claim 9, Downey teaches the process of claim 8, further comprising a step of separating said emulsion into an aqueous phase and an organic phase after step b). (Column 6 line 47-59)

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Downey Jr. as applied above in claims 1 and 9 in further view of Yamamoto JP 360111942A.

Regarding claim 10, Downey teaches the process of claim 9, but does not teach Comprising a step of using an optical sensor to isolate oils contained in said organic phase after the step of separating. Yamamoto does teach of the use of an optical sensor to detect oil. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine The apparatus in Downey with the sensor in Yamamoto since all claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yield predictable results to one of ordinary skill in the art at the time of the invention. The predictable result being the ability to sense the oil contamination.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cameron J. Allen whose telephone number is 571-270-3164. The examiner can normally be reached on M-Th 9-7pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Walter Griffin can be reached on 571-272-1447. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CJA

Walter D. Griffin

WALTER D. GRIFFIN
SUPERVISORY PATENT EXAMINER